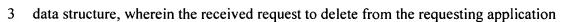
## **WHAT IS CLAIMED IS:**

1	1. A computerized method for updating data in a database table in response
2	to requests from a requesting application comprising one of a first application at a first
3	version level and a second application at a second version level, wherein the first
4	application recognizes the table as including a subset of columns in the table that is less
5	than all the columns in the table and wherein the second application recognizes the table
6	as including all the columns in the table, comprising:
7	receiving a request from the requesting application for specified columns from
8	one record in the table;
9	accessing the requested record;
10	generating a data structure including data from the specified columns in the
11	requested record;
12	determining whether the requesting application is capable of recognizing all the
13	columns in the table;
14	adding to the data structure data from each column in the table that is not one of
15	the subset of columns if the requesting application is determined to not recognize all the
16	columns in the table; and

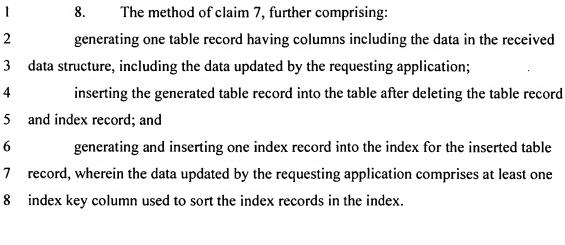
1 2. The method of claim 1, wherein the second version level of the application 2 includes additional functionality over the first version level.

returning the data structure to the requesting application.

- 1 3. The method of claim 1, further comprising:
  2 receiving from the requesting application a request to delete the accessed record
  3 after returning the data structure to the requesting application; and
  4 deleting the accessed record from the table.
- 1 4. The method of claim 3, wherein generating the data structure further 2 comprises adding a record identifier identifying the accessed record in the table to the



- 4 requests to delete the record having the record identifier included in the data structure.
- 1 5. The method of claim 3, further comprising:
- 2 receiving the data structure returned to the requesting application including data
- 3 updated by the requesting application;
- 4 generating a table record having columns including the data in the received data
- 5 structure, including the data updated by the requesting application; and
- 6 inserting the generated table record into the table.
- 1 6. The method of claim 5, further comprising:
- 2 after deleting the table record, deleting an index record in an index on the table
- 3 corresponding to the deleted table record; and
- 4 adding one index record to the index for the inserted table record, wherein the
- 5 data updated by the requesting application comprises at least one index key column used
- 6 to sort the index records in the index.
- 7. The method of claim 1, wherein the request from the requesting
- 2 application comprises a request to update at least one column in the table that is a key
- 3 column in one index record corresponding to the requested record in an index on the
- 4 table, further comprising:
- 5 deleting the accessed record from the table and the index record corresponding to
- 6 the accessed record; and
- 7 receiving the data structure returned to the requesting application including data
- 8 modified by the requesting application in at least one column in the table that is one key
- 9 column in the index.



- 1 9. The method of claim 1, wherein the request for specified columns from 2 one record comprises a database query.
- 1 10. A computerized method for updating data in a database table by a first
  2 application at a first version level, wherein the first application recognizes the table as
  3 including a subset of columns in the table that is less than all the columns in the table,
  4 wherein a second application at a second version level recognizes the table as including
  5 all the columns in the table, wherein the first application performs:
  6 transmitting a request for specified columns from one record in the table to an

application server managing access to the database table;

in response to the request, receiving from the application server a data structure including data from the specified columns in the requested record and data from each column in the table that is not one of the subset of columns recognized by the first application.

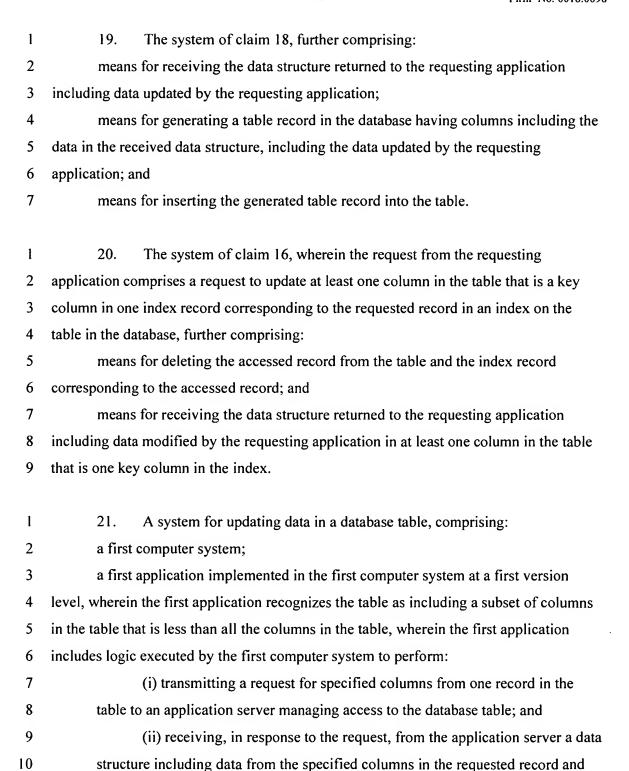
1 11. The method of claim 10, wherein the second version level of the application includes additional functionality over the first version level.

l	12.	The method of claim 10, further comprising:
2	transn	nitting to the application server a request to delete the requested record from
3	the table.	
1	13.	The method of claim 12, further comprising:
2	updati	ng in the received data structure one of the subset of columns; and

- returning the updated data structure to the application server to cause the
  application server to generate a table record having columns including the data in the
  updated data structure and insert the generated table record into the table.
- 1 14. The method of claim 13, wherein the request to delete further causes the application server to delete an index record in an index on the table corresponding to the deleted table record, wherein returning the updated data structure to the application server further causes the application server to add one index record to the index for the inserted table record, and wherein the data updated by the requesting application comprises at least one index key column used to sort the index records in the index.
- 1 15. The method of claim 10, wherein the request comprises a request to 2 update at least one column in the table that is a key column in one index record 3 corresponding to the requested record in an index on the table, wherein the transmitted 4 request further causes the application server to delete the accessed record from the table 5 and delete the index record corresponding to the accessed record, further comprising: 6 updating, in the received data structure, at least one key column in the index that 7 is also one of the subset of columns; and 8 returning the updated data structure to the application server to cause the 9 application server to generate and insert one table record in the table having columns 10 including the data in the received data structure and generate and insert one index record 11 into the index for the inserted table record.

1	16. A system for updating data in a database table in response to requests from
2	a requesting application comprising one of a first application at a first version level and a
3	second application at a second version level, wherein the first application recognizes the
4	table as including a subset of columns in the table that is less than all the columns in the
5	table and wherein the second application recognizes the table as including all the
6	columns in the table, comprising:
7	a computer readable medium including the database table;
8	means for receiving a request from the requesting application for specified
9	columns from one record in the table;
10	means for accessing the requested record;
11	means for generating a data structure including data from the specified columns in
12	the requested record;
13	means for determining whether the requesting application is capable of
14	recognizing all the columns in the table;
15	means for adding to the data structure data from each column in the table that is
16	not one of the subset of columns if the requesting application is determined to not
17	recognize all the columns in the table; and
18	means for returning the data structure to the requesting application.

- 1 17. The system of claim 16, wherein the second version level of the application includes additional functionality over the first version level.
  - 18. The system of claim 16, further comprising:
- 2 means for receiving from the requesting application a request to delete the
- 3 accessed record after returning the data structure to the requesting application; and
- 4 means for deleting the accessed record from the table.



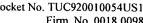
11	data from each column in the table that is not one of the subset of columns		
12	recognized by the first application.		
13	a second computer system; and		
14	a second application implemented in the second computer system at a second		
version level that recognizes the table as including all the columns in the table			
1	22. The system of claim 21, wherein the first application further includes logic		
2	to transmit to the application server a request to delete the requested record from the		
3	table.		
1	23. The system of claim 22, wherein the first application further includes logic		
2	to cause the first computer system to perform:		
3	updating in the received data structure one of the subset of columns; and		
4	returning the updated data structure to the application server to cause the		
5	application server to generate a table record having columns including the data in the		
6	updated data structure and insert the generated table record into the table.		
1	24. An article of manufacture including code for updating data in a database		
2	table in response to requests from a requesting application comprising one of a first		
3	application at a first version level and a second application at a second version level,		
4	wherein the first application recognizes the table as including a subset of columns in the		
5	table that is less than all the columns in the table and wherein the second application		
6	recognizes the table as including all the columns in the table, wherein the code is capable		
7	of causing operations comprising:		
8	receiving a request from the requesting application for specified columns from		
9	one record in the table;		
10	accessing the requested record;		
11	generating a data structure including data from the specified columns in the		
12	requested record;		

the accessed record; and



13	determining whether the requesting application is capable of recognizing all the	
14	columns in the table;	
15	adding to the data structure data from each column in the table that is not one of	
16	the subset of columns if the requesting application is determined to not recognize all the	
17	columns in the table; and	
18	returning the data structure to the requesting application.	
1	25. The article of manufacture of claim 24, wherein the second version level	
2	of the application includes additional functionality over the first version level.	
	·	
1	26. The article of manufacture of claim 24, further comprising:	
2	receiving from the requesting application a request to delete the accessed record	
3	after returning the data structure to the requesting application; and	
4	deleting the accessed record from the table.	
1	27. The article of manufacture of claim 26, further comprising:	
2	receiving the data structure returned to the requesting application including data	
3	updated by the requesting application;	
4	generating a table record having columns including the data in the received data	
5	structure, including the data updated by the requesting application; and	
6	inserting the generated table record into the table.	
1	28. The article of manufacture of claim 24, wherein the request from the	
2	requesting application comprises a request to update at least one column in the table that	
3	is a key column in one index record corresponding to the requested record in an index on	
4	the table, further comprising:	

deleting the accessed record from the table and the index record corresponding to



7	receiving the data structure returned to the requesting application including data		
8	modified by the requesting application in at least one column in the table that is one key		
9	column in the index.		
1	29. An article of manufacture including code implemented in a first		
2	application at a first version level for updating data in a database table, wherein the first		
3	application recognizes the table as including a subset of columns in the table that is less		
4	than all the columns in the table, wherein a second application at a second version level		
5	recognizes the table as including all the columns in the table, wherein the code in the first		
6	application causes operations to be performed comprising:		
7	transmitting a request for specified columns from one record in the table to an		
8	application server managing access to the database table;		
9	in response to the request, receiving from the application server a data structure		
10	including data from the specified columns in the requested record and data from each		
11	column in the table that is not one of the subset of columns recognized by the first		
12	application.		
1	30. The article of manufacture of claim 29, further comprising:		
2	transmitting to the application server a request to delete the requested record from		
3	the table.		
1	The article of manufacture of claim 29, further comprising:		
2	updating in the received data structure one of the subset of columns; and		
3	returning the updated data structure to the application server to cause the		

application server to generate a table record having columns including the data in the

updated data structure and insert the generated table record into the table.